(gdb) print f

$14 = 34

(gdb) print i

$15 = 0

(gdb) run

The program being debugged has been started already.

Start it from the beginning? (y or n) y

Starting program: /nfs/student/s/sseppala/Desktop/LabWork/Lab1

Breakpoint 1, main () at LabExcersize1.c:5

5 int f = 34;

(gdb) print f

$16 = 0

(gdb) continue

Continuing.

Breakpoint 2, main () at LabExcersize1.c:6

6 float i = 2345.2345;

(gdb) print f

$17 = 34

(gdb) continue

Continuing.

Breakpoint 3, main () at LabExcersize1.c:7

7 float n2 = 0.0;

(gdb) print i

$18 = 2345.23462

(gdb) continue

Continuing.

Breakpoint 4, main () at LabExcersize1.c:8

8 float t5 = -5.000001;

(gdb) print n2

$19 = 0

(gdb) continue

Continuing.

[Inferior 1 (process 8392) exited normally]

(gdb) print n2

No symbol "n2" in current context.

(gdb) help examine

Undefined command: "examine". Try "help".

(gdb) examine help

Undefined command: "examine". Try "help".

(gdb) examine

Undefined command: "examine". Try "help".

(gdb) examine

Undefined command: "examine". Try "help".

(gdb) help x

Examine memory: x/FMT ADDRESS.

ADDRESS is an expression for the memory address to examine.

FMT is a repeat count followed by a format letter and a size letter.

Format letters are o(octal), x(hex), d(decimal), u(unsigned decimal),

t(binary), f(float), a(address), i(instruction), c(char) and s(string).

Size letters are b(byte), h(halfword), w(word), g(giant, 8 bytes).

The specified number of objects of the specified size are printed

according to the format.

Defaults for format and size letters are those previously used.

Default count is 1. Default address is following last thing printed

with this command or "print".

(gdb) run

Starting program: /nfs/student/s/sseppala/Desktop/LabWork/Lab1

Breakpoint 1, main () at LabExcersize1.c:5

5 int f = 34;

(gdb) continue

Continuing.

Breakpoint 2, main () at LabExcersize1.c:6

6 float i = 2345.2345;

(gdb) continue

Continuing.

Breakpoint 3, main () at LabExcersize1.c:7

7 float n2 = 0.0;

(gdb) x/4b n2

0x0: Cannot access memory at address 0x0

(gdb) x/4b i

0x929: Cannot access memory at address 0x929

(gdb) print x/4b i

No symbol "x" in current context.

(gdb) print i

$20 = 2345.23462

(gdb) x/4b f

0x22: Cannot access memory at address 0x22

(gdb) x/4b 0x22

0x22: Cannot access memory at address 0x22

(gdb) x/4b \*f

Cannot access memory at address 0x22

(gdb) x f

0x22: Cannot access memory at address 0x22

(gdb) x/b f

0x22: Cannot access memory at address 0x22

(gdb) x/b &f

0x7fffffffe6f0: 34

(gdb) x/4b &f

0x7fffffffe6f0: 34 0 0 0

(gdb) x/32b &f

0x7fffffffe6f0: 34 0 0 0 0 0 0 0

0x7fffffffe6f8: 109 -57 -93 -9 -1 127 0 0

0x7fffffffe700: 0 0 0 0 0 0 0 0

0x7fffffffe708: -40 -25 -1 -1 -1 127 0 0

(gdb) x/8b &f

0x7fffffffe6f0: 34 0 0 0 0 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/4b &i

0x7fffffffe6ec: -63 -109 18 69

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) x/8b &i

0x7fffffffe6ec: -63 -109 18 69 34 0 0 0

(gdb) q

A debugging session is active.

Inferior 1 [process 9039] will be killed.

Quit anyway? (y or n) y

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:21:12: error: redefinition of 'i' with a different type

floatunion i = 2345.2345;

^

LabExcersize1.c:6:7: note: previous definition is here

float i = 2345.2345;

^

LabExcersize1.c:22:12: error: redefinition of 'n2' with a different type

floatunion n2 = 0.0;

^

LabExcersize1.c:7:7: note: previous definition is here

float n2 = 0.0;

^

LabExcersize1.c:23:12: error: redefinition of 't5' with a different type

floatunion t5 = -5.000001;

^

LabExcersize1.c:8:7: note: previous definition is here

float t5 = -5.000001;

^

3 errors generated.

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:21:12: error: initializing 'floatunion' with an expression of

incompatible type 'double';

floatunion fu1 = 2345.2345;

^ ~~~~~~~~~

LabExcersize1.c:22:12: error: initializing 'floatunion' with an expression of

incompatible type 'double';

floatunion fu2 = 0.0;

^ ~~~

LabExcersize1.c:23:12: error: initializing 'floatunion' with an expression of

incompatible type 'double';

floatunion fu3 = -5.000001;

^ ~~~~~~~~~

3 errors generated.

sseppala@b146-13:~/Desktop/LabWork$ clear

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:21:12: error: initializing 'floatunion' with an expression of

incompatible type 'double';

floatunion fu1 = 2345.2345;

^ ~~~~~~~~~

LabExcersize1.c:22:12: error: initializing 'floatunion' with an expression of

incompatible type 'double';

floatunion fu2 = 0.0;

^ ~~~

LabExcersize1.c:23:12: error: initializing 'floatunion' with an expression of

incompatible type 'double';

floatunion fu3 = -5.000001;

^ ~~~~~~~~~

3 errors generated.

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:24:5: error: assigning to 'floatunion' from incompatible type 'int';

fu1 =10;

^~~

LabExcersize1.c:25:5: error: assigning to 'floatunion' from incompatible type 'int';

fu2 = -5;

^ ~~

LabExcersize1.c:26:5: error: assigning to 'floatunion' from incompatible type 'double';

fu3 = 5.01;

^ ~~~~

3 errors generated.

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:21:5: error: assigning to 'floatunion' from incompatible type 'int';

fu1 =10;

^~~

LabExcersize1.c:22:5: error: assigning to 'floatunion' from incompatible type 'int';

fu2 = -5;

^ ~~

LabExcersize1.c:23:5: error: assigning to 'floatunion' from incompatible type 'double';

fu3 = 5.01;

^ ~~~~

3 errors generated.

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:21:5: error: assigning to 'floatunion' from incompatible type 'int';

fu1 =10;

^~~

LabExcersize1.c:22:5: error: assigning to 'floatunion' from incompatible type 'int';

fu2 = -5;

^ ~~

LabExcersize1.c:23:5: error: assigning to 'floatunion' from incompatible type 'double';

fu3 = 5.01;

^ ~~~~

3 errors generated.

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:3:1: warning: type specifier missing, defaults to 'int' [-Wimplicit-int]

main()

^~~~

LabExcersize1.c:21:5: error: assigning to 'floatunion' from incompatible type 'int';

fu1 =10;

^~~

LabExcersize1.c:22:5: error: assigning to 'floatunion' from incompatible type 'int';

fu2 = -5;

^ ~~

LabExcersize1.c:23:5: error: assigning to 'floatunion' from incompatible type 'double';

fu3 = 5.01;

^ ~~~~

1 warning and 3 errors generated.

sseppala@b146-13:~/Desktop/LabWork$ gcc -g LabExcersize1.c -o Lab1

LabExcersize1.c: In function â€˜mainâ€™:

LabExcersize1.c:21:5: error: incompatible types when assigning to type â€˜floatunionâ€™ from type â€˜intâ€™

LabExcersize1.c:22:5: error: incompatible types when assigning to type â€˜floatunionâ€™ from type â€˜intâ€™

LabExcersize1.c:23:5: error: incompatible types when assigning to type â€˜floatunionâ€™ from type â€˜doubleâ€™

sseppala@b146-13:~/Desktop/LabWork$ clang -g LabExcersize1.c -o Lab1

LabExcersize1.c:3:1: warning: type specifier missing, defaults to 'int' [-Wimplicit-int]

main()

^~~~

1 warning generated.

sseppala@b146-13:~/Desktop/LabWork$ gdb Lab1

GNU gdb (Ubuntu/Linaro 7.4-2012.04-0ubuntu2.1) 7.4-2012.04

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There is NO WARRANTY, to the extent permitted by law. Type "show copying"

and "show warranty" for details.

This GDB was configured as "x86\_64-linux-gnu".

For bug reporting instructions, please see:

<<http://bugs.launchpad.net/gdb-linaro/>>...

Reading symbols from /nfs/student/s/sseppala/Desktop/LabWork/Lab1...done.

(gdb) break 21

Breakpoint 1 at 0x4004f4: file LabExcersize1.c, line 21.

(gdb) break 22

Breakpoint 2 at 0x4004fa: file LabExcersize1.c, line 22.

(gdb) break 23

Breakpoint 3 at 0x400500: file LabExcersize1.c, line 23.

(gdb) break 34

No line 34 in the current file.

Make breakpoint pending on future shared library load? (y or [n]) n

(gdb) break 24

Breakpoint 4 at 0x400506: file LabExcersize1.c, line 24.

(gdb) run

Starting program: /nfs/student/s/sseppala/Desktop/LabWork/Lab1

Breakpoint 1, main () at LabExcersize1.c:21

21 fu1.f =10;

(gdb) continue

Continuing.

Breakpoint 2, main () at LabExcersize1.c:22

22 fu2.f = -5;

(gdb) x/b &fu1

0x7fffffffe6f0: 0

(gdb) x/8b &fu1

0x7fffffffe6f0: 0 0 32 65 0 0 0 0

(gdb) union

Undefined command: "union". Try "help".

(gdb) print union

A syntax error in expression, near `'.

(gdb) print 'union'

A syntax error in expression, near `'.

(gdb) x/8b &fu1.f

0x7fffffffe6f0: 0 0 32 65 0 0 0 0

(gdb) x/8b &fu1.b

0x7fffffffe6f0: 0 0 32 65 0 0 0 0

(gdb) x/h fu1

Value can't be converted to integer.

(gdb) x/h &fu1

0x7fffffffe6f0: 0

(gdb) x/8h &fu1

0x7fffffffe6f0: 0 16672 0 0 -14483 -2141 32767 0

(gdb) x/4b &fu1

0x7fffffffe6f0: 0 0 32 65

(gdb) set variable fu1.f = 11

(gdb) print fu1

$1 = {f = 11, b = {fraction = 3145728, exponent = 130, sign = 0}}

(gdb) x/4b fu1.b.fraction

0x300000: Cannot access memory at address 0x300000

(gdb) x/4b &fu1.b.fraction

0x7fffffffe6f0: 0 0 48 65

(gdb) x/4b &fu1.b.exponent

0x7fffffffe6f0: 0 0 48 65

(gdb) x/b &fu1.b.exponent

0x7fffffffe6f0: 0

(gdb) x/b &fu1.b.fraction

0x7fffffffe6f0: 0

(gdb) print fu1.b

$2 = {fraction = 3145728, exponent = 130, sign = 0}

(gdb) x/h &fu1.b

0x7fffffffe6f0: 0

(gdb) x/h &fu1.b.fraction

0x7fffffffe6f0: 0

(gdb) x/h &b.fraction

No symbol "b" in current context.

(gdb) x/h &fu1.b.sign

0x7fffffffe6f0: 0

(gdb) x/h &fu2.b.sign

0x7fffffffe6e8: 0

(gdb) print fu2

$3 = {f = 0, b = {fraction = 0, exponent = 0, sign = 0}}

(gdb) continue

Continuing.

Breakpoint 3, main () at LabExcersize1.c:23

23 fu3.f = 5.01;

(gdb) print fu2

$4 = {f = -5, b = {fraction = 2097152, exponent = 129, sign = 1}}

(gdb) x/b &fu2.b.sign

0x7fffffffe6e8: 0

(gdb) x/b &fu2.b.exponent

0x7fffffffe6e8: 0

(gdb) x/4b &fu2.b.exponent

0x7fffffffe6e8: 0 0 -96 -64

(gdb) x/4b &fu2.b.sign

0x7fffffffe6e8: 0 0 -96 -64

(gdb) x/4b &fu2.b.fraction

0x7fffffffe6e8: 0 0 -96 -64

(gdb) x/4b &fu2.b

0x7fffffffe6e8: 0 0 -96 -64

(gdb) p/x fu2

$5 = {f = 0xfffffffb, b = {fraction = 0x200000, exponent = 0x81, sign = 0x1}}

(gdb) x/4b &fu2.b

0x7fffffffe6e8: 0x00 0x00 0xa0 0xc0

(gdb) exit

Undefined command: "exit". Try "help".

(gdb) q

A debugging session is active.

Inferior 1 [process 9121] will be killed.

Quit anyway? (y or n) y